

MARKED-UP VERSION OF THE AMENDED CLAIMS:

1. (currently amended) A computer input pointing device which comprises a lower disposed casing, an upper movable steering element, steering element's movement detector, and the system transmitting information about such movement to the computer, wherein the steering element (3) is connected to the casing (2) by a connection, ~~with the possibility of~~ allowing two dimensional spherical movement, while the center of the spherical surface (4) defined by the movement of the steering element (3) in relation to the casing (2) is situated above the steering element (3).
2. (previously presented) The input pointing device according to claim 1, wherein the center of the spherical surface (4) defined by the movement of the steering element (3) is situated above the steering element (3).
3. (currently amended) The input pointing device according to claim 1, wherein the connection of a convex side of the steering element to the casing (2) is a surface of spherical shape (21a).
4. (canceled)

5. (previously presented) The input pointing device according to claim 1, wherein the connection of the steering element to the casing (2) has ball bearings (21e).

6. (previously presented) The input pointing device according to claim 1, wherein the connection of the steering element to the casing (2) is a ball bearing (21b).

7. (currently amended) A computer input pointing device

which comprises a casing, an upper movable steering element, steering element's movement detector, and the system transmitting information about such movement to the computer, wherein the steering element (3) is connected to the casing (2) by a connection, ~~with the possibility of~~ allowing two dimensional spherical movement, while the center of the spherical surface (4) defined by the movement of the steering element (3) in relation to the casing (2) is situated above the steering element (3),

wherein said connection has a form of perpendicular, mutually connected flat rolling or sliding bearings (21f, 21g), of which one (21f) is connected to the steering element (3) and the other (21g) to the casing of the input pointing device (1e).

8. (previously presented) The input pointing device according to claim 1, wherein the steering element (3) rests freely on the casing (2).

9. (currently amended) The input pointing device according to claim 1, wherein the steering element (3) ~~has a possibility of relocation~~ is able to relocate only over the spherical surface defined by the movement of the steering element (3) in relation to the connection.

10. (previously presented) The input pointing device according to claim 9, wherein the connection is provided with a hole (22), whereas the steering element (3) comprises the upper part (31) and protective lower part (33); the latter prevents the steering element (3) from falling out of the hole (22), both of which are linked by means of a connecting element (32) leading through the hole (22) , wherein a lower side of the upper part (31) has a convex surface and wherein an upper side of the protective lower part (33) has a concave surface.

11. (currently amended) A computer input pointing device

which comprises a casing, an upper movable steering element, steering element's movement detector, and the system transmitting information about such movement to the computer, wherein the steering element (3) is connected to the casing (2) by a

connection, ~~with the possibility of~~ allowing two dimensional spherical movement, while the center of the spherical surface (4) defined by the movement of the steering element (3) in relation to the casing is situated above the steering element (3).

wherein the steering element (3) has a possibility of relocation only over the spherical surface defined by the movement of the steering element (3) in relation to the casing (2),

wherein the steering element (3) has a hollow space inside (35) and a hole (36) in the lower surface, whereas the casing (2) has a protective upper part (24) which prevents the steering element (3) from being disconnected and which is linked with the casing (2) by means of a connecting element (23) leading through the hole (36).

12. (previously presented) The input pointing device according to claim 9, wherein the steering element (3) is provided with a dome part (34) for user's hand.

13. (previously presented) The input pointing device according to claim 1, wherein the upper surface of the steering element (3) has an ergonomic shape adjusted to the shape of user's hand.

14. (canceled)

15. (previously presented) The input pointing device according to claim 1, wherein the steering element (3) movement detector has a form of micro-camera (5a).
16. (previously presented) The input pointing device according to claim 1, wherein the steering element (3) movement detector is provided with a light emitter (5b), whose ray, having been reflected from the steering element, is read by an optical sensor (5c).
17. (previously presented) The input pointing device according to claim 15, wherein the steering element (3) is covered with a network of graphic perforations.
18. (previously presented) The input pointing device according to claim 1, wherein the steering element (3) movement detector has a form of a dome (5d) and a system of perpendicular rollers (5e).
19. (canceled)
20. (canceled)
21. (canceled)

22. (canceled)

23. (currently amended) A computer input pointing device

which comprises a casing, an upper movable steering element, steering element's movement detector, and the system transmitting information about such movement to the computer, wherein the steering element (3) is connected to the casing (2) by a connection, ~~with the possibility of~~ allowing two dimensional spherical movement, while the center of the spherical surface (4) defined by the movement of the steering element (3) in relation to the casing is situated above the steering element (3),

wherein the computer input pointing device comprises supporting elements to maintain the steering element's (3) position after relocation, with a provision that the connecting element (23,32) is built in a telescope fashion and the supporting elements comprise an electromagnet (7a) shortening the length of the connecting element as well as that of an adversely acting spring (7b), both of which are situated in the segments of the connecting element (23, 32).

24. (previously presented) A computer input pointing device comprising

a casing (2) having on a side a ring of a sphere with a central opening with a diameter of the opening; wherein a radius of curvature of the ring of the sphere is disposed outside of the casing and wherein an outside surface is formed concave;

a steering element (3) having an outer spherical cap with a cap diameter larger than the diameter of the opening, wherein the outer spherical cap is disposed outside of the ring of the sphere and wherein a radius of curvature of the outer spherical cap is outside of the casing (2) and wherein an inside surface of the outer spherical cap is formed convex,

having an inner spherical cap with a cap diameter larger than the diameter of the opening, wherein the inner spherical cap is disposed inside of the ring of the sphere and wherein a radius of curvature of the inner spherical cap is substantially outside of the casing (2) and wherein an outside surface of the inner spherical cap is formed concave, and

having a centeredly disposed stub element solidly connecting the inner side of the outer spherical cap disposed toward the ring of the sphere to the outer side of the inner spherical cap disposed toward the ring of the sphere ;

a movement detector for detecting movement of the steering element (3); and

a transmission system connected to the movement detector for transferring movement information to a computer.

25. (previously presented) The input pointing device according to claim 24, wherein a diameter of the outer spherical cap is larger than a diameter of the inner spherical cap;

wherein the radius of curvature of the inner spherical cap is substantially equal to the radius of curvature of the outer spherical cap.

26. (previously presented) The input pointing device according to claim 25,

wherein a radius of curvature of the ring of a sphere is substantially equal to the radius of curvature of the outer spherical cap.

REMARKS

Claims 1 to 3, 5 to 13, 15 to 18 and 23 to 26 continue to be in the case.

The Office Action refers to Claim Objections.

3. Claims 1, 7, 9, 11, 23 stand objected to because of the following informalities: the word "possibility" is objected to since a more positive recitation should be used. Appropriate correction is required.

Applicants are now amending claims 1, 7, 9, 11, and 23 for elimination of the objectionable language.

The Office Action refers to Claim Rejections - 35 USC§ 102.

4. Claims 1-3, 8-9, 12, 13 stand rejected under 35 U.S.C. 102(b) as being anticipated by Arita et al (5,504,502).

Applicants respectfully traverse

As to claims 1, 2, Fig. 1 of Arita discloses a computer input pointing device comprising a casing (13, 19), an upper movable steering element (10), a steering element's movement detector (14, 14', 18), the steering element (10) is connected to the casing by a connection the spherical surface (Fig. 3 A) defined by the movement of the steering element in relation to the casing is situated above the steering element as claimed.

Claim 1 of the instant application as amended requires:

"wherein the steering element (3) is connected to the casing (2) by a connection allowing two dimensional spherical movement, while the center of the spherical surface (4) defined by the movement of the steering element (3) in relation to the casing (2) is situated above the steering element (3).".

In contrast to claim 1, the reference Arita et al. does not define a spherical center of the slider 10. Such spherical center of the slider 10 would be disposed of on the same side of the slider (10) as is the housing 13.

Claim 1 requires that the center of the spherical surface (4) is on an opposite side of the steering element (3) as is the casing (2). Thus the casing (2) is disposed on the convex side of the steering element (3). According to the reference Arita et al., the housing (13) is disposed on the concave side of the slider (10).

As to claim 3, Fig. 2 of Arita shows the connection of the steering element to the casing is a surface of spherical shape (13).

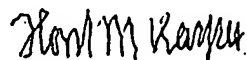
The present amendment further specifies claim 3 to more clearly distinguish over the reference Arita et al

Reconsideration of all outstanding rejections is respectfully requested.

All claims as presently submitted are deemed to be in form for allowance and an early notice of allowance is earnestly solicited.

Respectfully submitted,

Patrycjusz Kosun

By: 

Horst M. Kasper, his attorney,
13 Forest Drive, Warren, N.J. 07059
Tel.: (908) 526-1717 Fax: (908) 526-6977
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